



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/661,549      | 09/15/2003  | Takayuki Nagata      |                     | 9048             |

23364 7590 08/18/2005

BACON & THOMAS, PLLC  
625 SLATERS LANE  
FOURTH FLOOR  
ALEXANDRIA, VA 22314

|          |
|----------|
| EXAMINER |
|----------|

ZARROLI, MICHAEL C

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2839

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/661,549

Applicant(s)

NAGATA, TAKAYUKI

Examiner

Michael C. Zarroli

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11, 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/28/05 has been entered.

### ***Claim Objections***

2. Claim 8 objected to because of the following informalities: In the next to last line “a insertion slot.” Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

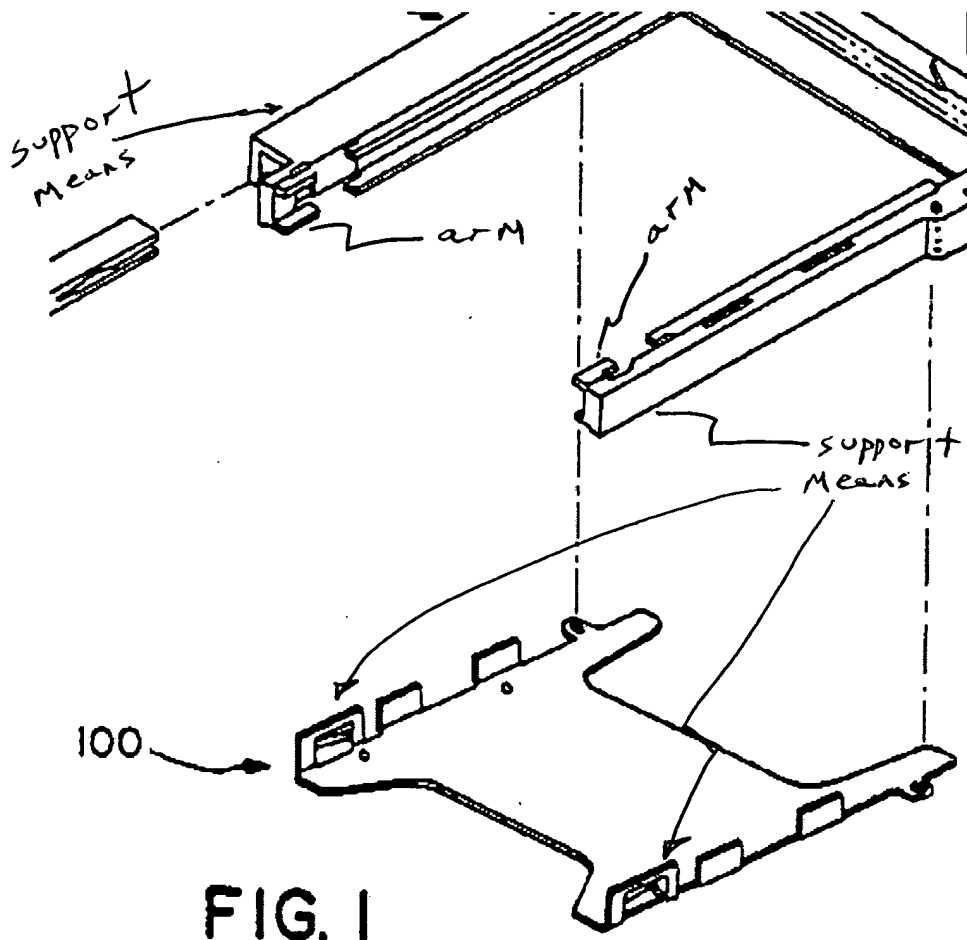
4. Claims 8-10 rejected under 35 U.S.C. 102(b) as being clearly anticipated by McHugh.

McHugh discloses a card connector (title) comprising: a body (12) made of an integral molded product of a synthetic resin (col. 11 lines 10-15), said body including a head portion and a pair of arms (unnumbered fig. 2) which extend outwardly from said head portion (fig. 14A top, fig. 14C right), each arm of said pair of arms including a foremost end portion (e.g. fig. 1 unnumbered, each arm has an end) a plurality of multipolar contacts (120, 126); and a sheet metal frame (100) which extends between said pair of arms (fig. 1), and which cooperates with said body to form a card insertion space (fig. 14A), wherein: said sheet metal frame including arm support means (see figure below) for blocking inward deflections of said foremost end portions said arm support means is configured by a receiving piece (108, 109, 110) which butts against an inward engagement face that is provided in a foremost end portion of one of said arms (fig. 4 between 97 & 99), said arm-supporting means (see fig. below) is extended in a thickness direction (fig. 14D 72 down) of a card C (not shown) which is to be inserted into said card insertion space, and a lateral width W of a insertion slot (fig. 15A

between arms) of said card insertion space is defined by a distance between opposing inward faces of said receiving pieces (fig. below, arrows).

Regarding claim 9 McHugh discloses that said receiving piece is formed by bending said frame (fig. 9).

Regarding claim 10 McHugh discloses that said arm support means is configured by a pair of receiving pieces (108) which are to butt against inward engagement faces that are provided in said foremost end portions (fig. 4 between 97 & 99) respectively, and said receiving pieces are formed by bending said frame (fig. 9).



Examiner does not agree with the applicant's description of the Japanese patent for McHugh discussed in the specification on pages 4-5. The foremost end portions of McHugh are prevented from deflecting by the arms supporting means of McHugh.

5. Claims 8 and, 13-14 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Chang.

Chang discloses a card connector (title) comprising: a body (2) made of an integral molded product of a synthetic resin said body including a head portion (20), and a pair of arms (22, 24) which extend outwardly from said head portion (fig. 1) each arm of said pair of arms including a foremost end portion (also at 22, 24 in fig. 1) a plurality of multipolar contacts (34); and a sheet metal frame (5) which extends between said pair of arms (fig. 2), and which cooperates with said body to form a card insertion space (200), wherein: said sheet metal frame including arm support means (528, 548) for blocking inward deflections of said foremost end portions (in fig. 3 foremost ends are prevented from deflecting by sheet metal frame arm support means), said arm support means is configured by a receiving piece (528, 522, 542, 548) which butts against an inward engagement face that is provided in a foremost end portion of one of said arms (figures 1 & 3) said arm-supporting means is extended in a thickness direction (fig. 1 at 521 & 541) of a card C (104) which is to be inserted into said card insertion space (fig. 10), and a lateral width W of a insertion slot (fig. 2 between arms) of said card insertion space is defined by a distance between opposing inward faces of said receiving pieces.

Regarding claim 13 Chang discloses that plate-like pieces (521, 541) which overlap outward faces of said pair of arms (fig. 3) to reinforce the arms respectively are formed by bending said frame (fig. 1).

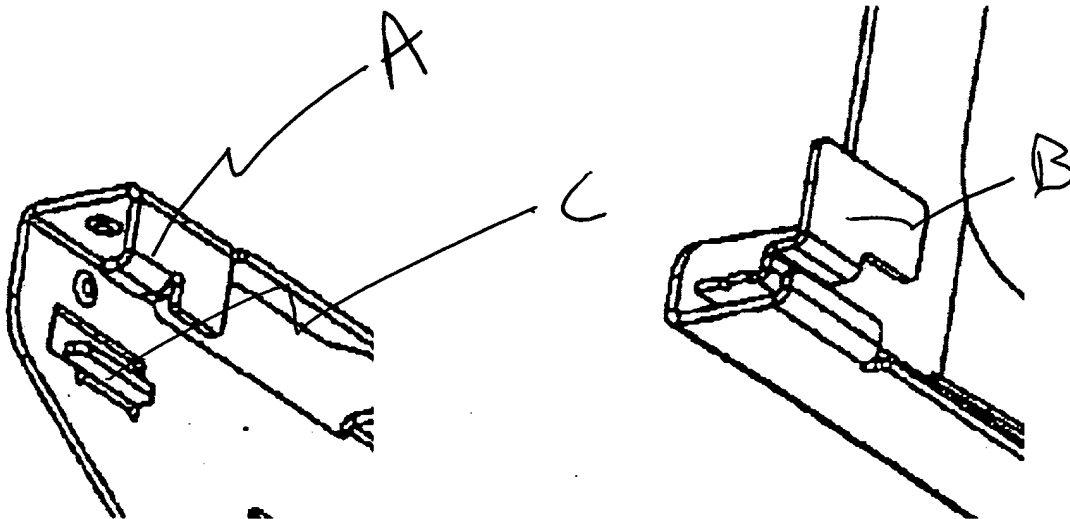
Regarding claim 14 Chang discloses that said frame has a face plate portion (50) which is extended from said head portion of said body to said foremost end portions of said arms (figures 1 & 3), and positions a, b (22, 24) of said foremost end portions of said arms where engagement faces are formed are clamped between said plate-like pieces and said arm supporting means, respectively (fig. 3).

6. Claim 15 rejected under 35 U.S.C. 102(e) as being clearly anticipated by Takada et al.

Takada discloses a card connector (title) comprising: a body (2) made of an integral molded product of a synthetic resin (col. 5 lines 6-8), said body including a head portion (fig. 3 unnumbered left side) and a pair of arms (fig. 4 unnumbered top & bottom) which extend outwardly from said head portion, each arm of said pair of arms including a foremost end portion (fig. 5 unnumbered right/left sides); a plurality of multipolar contacts (30) mounted to said body (fig. 3); and a sheet metal frame (3) which extends between said pair of arms (fig. 20), and which cooperates with said body to form a card insertion space (fig. 16), wherein: said sheet metal frame including arm support means for blocking inward deflections of said foremost end portions of said arms (see sections from fig. 38 copied below at A & B), at least one of which said arm supporting means including an engagement piece (see section from fig. 38 copied below at C) extending therefrom which aids



in further securing its associated foremost end portion and consequently said body to said sheet metal frame (fig. 30), said arm-supporting means is extended in a thickness direction (fig. 5 vertical axis) of a card C (10) which is to be inserted into said card insertion space, and a lateral width W of a insertion slot (fig. 5 horizontal axis) of said card insertion space is defined by a distance between opposing inward faces of said receiving pieces (fig. 5 horizontal axis).



*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over McHugh as applied to claim 8 above, and further in view of Takamori et al. McHugh does not disclose a lower plate portion.

Takamori discloses a card connector body with a lower plate portion (30) which is continuously integrated with said head portion and said pair of arms, said card insertion space being formed between said lower plate portion and said frame, a recessed portion that is recessed toward said head portion is formed in said lower plate portion and between said pair of arms (figures 2 & 3), and right and left recessed edges of said recessed portion are formed into an arcuate shape (fig. 4). At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the body portion of McHugh with an arcuate lower plate portion per the teachings of Takamori. The motivation for such a change would be to provide more structural support for the entire device.

### ***Response to Arguments***

9. Applicant's arguments filed 7/28/05 have been fully considered but they are not persuasive.

McHugh clearly shows that a support means butts against an inward engagement face at the end of one of the arms. See McHugh figures 1 and 14A. McHugh's arm support means will bolster their respective arms prevent the foremost end portion from deflecting.

### *Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 571-272-2101. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.C. Patel can be reached on (571) 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Zarroli  
Primary Examiner  
Art Unit 2839

MCZ  
MCZ